## CILANTRO



Presented by





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This production summary provides an overview of growing, harvesting, and post harvesting practices. There are some common practices that many large commercial growers use when producing cilantro, and though there are variations in these practices, having an understanding of the most common methods used will be helpful when carrying out regulatory activities.

#### By the end of this summary, you will be able to:

- 1. List the top U.S. cilantro producing regions.
- 2. Identify the most common farming practices used in the production of cilantro.



Cilantro is grown commercially in both small and large scale farming operations in almost every country of the world. Mexico is the largest exporter of cilantro. In the United States, California is the largest

cilantro-producing state with annual production exceeding 56 million pounds. It is also grown to a lesser extent in Arizona, Oregon, and Washington (Fig 1).

Cilantro is an annual herb in the same family of other aromatic plants such as celery and parsley. Other names for cilantro include Mexican or Chinese parsley. Cilantro leaves are light green, feathery, and flat. While the leaves are used as an herb, the dried seeds, called "coriander", are used as a spice.

In California, cilantro is grown year-round, with the main harvest from March through mid-November, primarily along the southern and central coast. In California's Coachella Valley and in Yuma, Arizona, cilantro is planted as a winter crop in late September to November and is harvested from November through March. In the upper Northwest, cilantro is grown from May through November.



# GROWING

Cilantro can be grown under a wide range of climactic conditions; however, hot weather during the summer months causes cilantro to bolt quickly and reduces foliage development. Bolting is when

a plant prematurely produces a flowering stem before harvest is ready. This type of rapid flower growth occurs at the expense of the leafy growth desired by a grower. Temperatures ranging from 50° to 85°F provide optimal growing conditions. Cilantro can tolerate a light frost.

A variety of different soil types are suitable for cilantro production as long as nutrient and moisture requirements are met for plant growth and salt levels are within acceptable limits.

Cilantro is grown on beds 40 to 80 inches wide. The 40-inch beds are typically planted with two lines per bed. Seedlines may vary from two to five inches wide. The 80-inch beds are planted with 24 to 33 seedlines to cover the bed top



Fig 1 - Top Cilantro Producing States in the US



entirely. Depending on the desired plant population, 25 to 100 pounds of seed are planted per acre. Seeds are planted one quarter to one half an inch deep. A cilantro crop will mature in 40 to 45 days. Cilantro is often used as a rotation crop; however, some growers may double-crop in a given year.

Depending on regional climate and soil conditions, the ground may be moistened with overhead sprinkler irrigation to soften the soil for tillage, seedbed preparation, and seed germination. Cilantro has a relatively shallow root system; as such, it thrives on frequent, short irrigations. However, overwatering can also lead to oversaturation of soil and subsequent development of certain leaf diseases. For post-germination irrigation, most growers favor the use of furrows or drip tapes in lieu of overhead watering.

Growing cilantro requires close attention to soil conditions. Supplemental fertilization with nitrogen, phosphorus, and potassium is often used to condition the soil prior to planting. When more than one harvest is desired, a second application can be done during the growing season.

Weed growth within cilantro beds is a common problem. Relatively few herbicides can be used on cilantro beds and the plants germinate relatively slowly allowing time for weeds to overgrow early in the growth cycle. Cultivation to remove weeds between cilantro plants is not possible because the fields are planted so densely. To prevent weed overgrowth, growers may employ specialized techniques to prevent and control weed growth. Prior to harvest, hand weeding may also be utilized. Cilantro is susceptible to a variety of different insect, fungal, nematode, and viral infections. However, California cilantro production areas are not typically affected by serious pest incursions. Monitoring of plants and selection of non-infested fields for planting can help prevent losses from pests.



Cilantro is primarily hand harvested and sold in bunches to be used as a fresh herb. Fresh cilantro production is labor intensive. Using a small sickle type knife, workers cut just above the soil. Bunches

are formed and tied together with rubber bands or twist ties. After the bunch is tied, the worker will cut the bottom end of the bunch to provide a nice uniform bottom. The cilantro bunches are placed in plastic totes, stacked on pallets, and removed from the field. Cilantro may also be mechanically harvested and sold in bulk for food service or processing.



In California, fresh cilantro is usually hydrocooled or cooled with ice as soon as it is brought in from the field. Boxes or totes are held at 33° to 35°F prior to shipment. Cilantro that is kept in cool storage has a shelf life of at least 14 days.



### CONCLUSION

Having a basic understanding of the way cilantro is grown, harvested, and cooled will provide the basic background information that will be helpful to regulators when completing inspections or investigations in the field.

The agricultural practices described in this production summary are common on most large commercial farms like those found in major cilantro producing regions in the United States. There are undoubtedly variations in these practices depending on the region, operation size, and individual grower preferences. This is especially true of farms outside of the U.S.

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